

NOVARTIS One Health Plaza, Bidg. 104 East Hanover, NJ 07936-1080

Corporate Intellectual Property Fax Cover Sheet

Date: No	W. 21, 2005 Tir	ne: A	M PM (rcle one)
Namber of p	pages (including cover sheet	: 33	· ·
То:	Patricia Booker	Phone: ()
Location:		Fax: (-	103) 746-6695
cc:			
From:	Thomas Savitsly	Phone: (8	362)
	<u> </u>	Fax: (9	773) 781-8064
Re: TX 4	-32366A SN. 10	507, 060	
			•
Ke: 1	4s Requested, E	nclosed is	s a copy
eg.	As Requested, E the Response suk	mitted or	1 June 13/1995.

CONFIDENTIALITY NOTICE

THIS FAX CONTAINS CONRODINIAL INDOMINATION WHICH MAY BE PRIVIEGED AND IS INTENDED SOLELY FOR THE USE OF THE ABOVE-NAMED RECIPIENTS). IT MAY BE EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW. IF YOU ARE NOT AN INTENDED RECIPIENTS OR PERSON RESPONSIBLE FOR DELIVERY OF THIS FAX TO AN INTENDED RECIPIENT, YOU ARE HETERY NOTIFIED THAT YOU HAVE RECEIVED THIS FAX IN ERROR, AND THAT ANY REVIEW, DISSEMBLATION, DISCLOSURE, COPYING OR OTHER USE OF THIS FAX OR ITS CONTENTS IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS FAX IN ERROR, PLEASE NOTIFY THE SENDER IMMEDIATELY BY TELEPHONE AT ONE OF THE PHONE NUMBERS SET FORTH ABOVE AND DESTROY THIS FAX IMMEDIATELY.

1



CASE TX/4-32366A

FILING BY "EXPRESS MAIL" UNDER 37 CFR 1.10

Exoress Mail Label Number

June 13, 2005 Date of Deposit

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE PCT NATIONAL STAGE APPLICATION OF

BAENTELI ET AL.

INTERNATIONAL APPLICATION NO: PCT/EP03/02710

FILED: 14 MARCH 2003

U.S. APPLICATION NO: 10/507,060

35 USC §371 DATE: Herewith

FOR: 2,4-DIAMINOPYRIMIDINE DERIVATIVES

MS: PCT

Commissioner for Patents

PO Box 1450

Alexandria, VA 22313-1450

RESPONSE TO NOTICE TO FILE MISSING PARTS

Sir:

The Notice to File Missing Parts of Application mailed March 3, 2005 (a copy of which is enclosed) has a shortened statutory time set to expire on May 3, 2005.

A two-month extension is hereby requested pursuant to 37 CFR §1.136(a). Please charge Deposit Account No. 19-0134 in the name of Novartis in the amount of \$450 for payment of the extension fee.

In response, applicants now submit an original or copy of a fully executed Declaration and Power of Attorney. Please charge the \$130 surcharge fee under 37 CFR §1.16(e) to Deposit Account No. 19-0134 in the name of Novartis.

Also enclosed is a nucleotide and/or amino acid sequence submission, including a computer readable copy, a paper copy and a Statement Verifying Identity of Above Copies.

The Commissioner is hereby authorized to charge any additional fees under 37 CFR §1.17 which may be required, or credit any overpayment, to Account No. 19-0134 in the name of Novartis.

ı

MOVARTIS INTELLECT PROP

A duplicate copy of all letter is provided for charging purpole

Respectfully submitted,

Novartis Corporate Intellectual Property One Health Plaza, Building 104 East Hanover, NJ 07936-1080 (862) 778-7909 Date: June 13, 2005

Thomas R. Savitsky Attorney for Applicants Reg. No. 31,661 NOVARTIS INTELLECT PROP

973 781 8064

P.04

Page 1 of 2







United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patont and Trademark Office Adhers COMMISSIONER FOR PATENTS 20. Brail Company 2013-146

LLC ADDLICA	TION NUMBER NO.	FIRST NAMED APPLICANT	ATT	, DOCKET NO.
U.S. APPLICATION NUMBER NO. 10/507,060		Rolf Baenteli	TX/4-32366A	
10/30 /,000			INTERNATIONAL APPLICATION NO.	
		_	PCT/EP03	/02710
001095	4		I.A. FILING DATE	PRIORITY DATE
NOVARTIS	•	_	03/14/2003	03/15/2002

001095 NOVARTIS CORPORATE INTELLECTUAL PROPERTY ONE HEALTH PLAZA 104/3 EAST HANOVER, NJ 07936-1080

TRS

CONFIRMATION NO. 8326 371 FORMALITIES LETTER 11111 IN TOTAL THE PROPERTY OF T

Date Mailed: 03/03/2005

NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Copy of the International Application filed on 09/09/2004
- Copy of the International Search Report filed on 09/09/2004
- Copy of IPE Report filed on 09/09/2004
- Copy of Annexes to the IPER filed on 09/09/2004
- Preliminary Amendments filed on 09/09/2004
- Information Disclosure Statements filed on 09/09/2004
- Biochemical Sequence Diskette filed on 09/09/2004
- Oath or Declaration filed on 09/09/2004
- Biochemical Sequence Listing filed on 09/09/2004
- Copy of references cited in ISR filed on 09/09/2004
- U.S. Basic National Fees filed on 09/09/2004
- Priority Documents filed on 09/09/2004
- Power of Attorney filed on 09/09/2004



The following items MUST be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

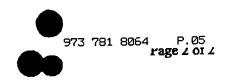
- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application
 by the international application number and international filing date. The current oath or declaration does
 not comply with 37 CFR 1.497(a) and (b) in that it:
 - is not executed in accordance with either 37 CFR 1.66 or 37 CFR 1.68.
- \$130 Surcharge for providing the oath or declaration later than 30 months from the priority date (37 CFR 1.492(e)) is required.

SEQUENCE LISTING REQUIRED

DOCKETED FOR: May 3, 2005







SUMMARY OF FEES DUE:

Total additional fees required for this application is \$130 for a Large Entity:

\$130 Late oath or declaration Surcharge.

The following Items MUST be furnished within the period set forth below:

- The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):
 - See Attachment(Raw Sequence Error Report)
 - APPLICANT MUST PROVIDE:
 - An initial or substitute paper copy or compact disc of the "Sequence Listing," as well as an amendment directing its entry into the specification.
- For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:
 - For Rules Interpretation, call (703) 308-4216
 - To Purchase Patentin Software, call (703) 306-2600
 - For Patentin Software Program Help, call (703) 306-4119 or e-mall at patin21help@uspto.gov or patin3help@uspto.gov

ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT,

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

A copy of this notice MUST be returned with the response.

PATRICIA A BOOKER

Telephone: (703) 308-9140 EXT 204

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/507,060	PCT/EP03/02710	TX/4-32366A

FORM PCT/DO/EO/905 (371 Formalities Notice)





RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: Source: Date Processed by STIC:

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS. PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,

TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TOREDUCKERORED SEQUENCE DISTINGS, PILESE USE THE CHECKER VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS: http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>, EFS Submission User Manual - cPAVE)

3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04): U.S. Patent and Trademark Office, 220 20th Street S., Gustomer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA 22202

Revised 05/17/04

BEST AVAILABLE COPY



Raw Sequence Listing Error Summary

	1 75:0 :/ 6
ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 10/507,060
ATTN: NEW RULES CASES:	PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE
Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
Misaligned Amino Numbering	The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
4 Non-ASCII .	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5Variable Length	Sequence(s)contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220> <223> section that some may be missing.
6Patentin 2.0 "bug"	A "bug" in Patentin version 2.0 has caused, the <220><223> section to be missing from amino acid sequences(s) Normally, Patentin would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220><223> section to the subsequent amino acid sequence. This applies to the manuatory <220><223> sections for Artificial or Unknown sequences.
7Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped
	Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8Skipped Sequences (NEW RULES)	Sequence(s) missing. If intentional, please insert the following lines for each akipped sequence. <210> sequence id number <400> sequence id number 000
9Use of n's or Xma's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>~223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
10 Invalid <213> - Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220><223> section is required when <213> response is Unknown or is Artificial Sequence
11Use of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
12PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of Patentin version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as inclicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13 Misuse of T/Xaa	"n" can only represent a single <u>nucleotide;</u> "Xas" can only represent a single <u>amino acid</u>
-	AMC - Biotechnology Systems Branch - 09/09/2003

BEST AVAILABLE: COPY

P.08

NOV-21-2005 11:49

Page 1 of:



RAW SEQUENCE LISTING PATENT APPLICATION: US/10/507,060 DATE: 09/23/2004 TIME: 11:58:50

Input Set : A:\PTO.FG.txt

Output Set: N:\CRF4\09232004\J507060.raw

```
<110> APPLICANT: Baenteli, Rolf
              Zenke, Gerhard
              Cooke, Nigel Graham
      7
              Duthaler, Rudolf
              Thoma Gebhard
      9
              Von Matt, Anette
     10
              Honda, Toshiyuki
     11
              Matsuura, Naoko
     12
              Nonomura, Kazuhiko
     13
                                                                      Dogs Not Comply
              Ohmori, Osamu
     14
                                                                  Corrected Diskette Needer
              Umemura, Ichiro
     15
              Hinterding, Klaus
     16
              Papageorgiou, Christos
     17
     21 <120> TITLE OF INVENTION: Pyrimidine derivatives
     25 <130> FILE REFERENCE: 4-32366A
C--> 29 <140> CURRENT APPLICATION NUMBER: US/10/507,060
C--> 29 <141> CURRENT FILING DATE: 2004-09-09
     29 <150> PRIOR APPLICATION NUMBER: GB 0206215.6
     31 <151> PRIOR FILING DATE: 2002-03-15
     35 <160> NUMBER OF SEQ ID NOS: 4
     39 <170> SOFTWARE: PatentIn version 3.1
     43 <210> SEQ ID NO: 1
     45 <211> LENGTH: 15
     47 <212> TYPE: PRT
     49 <213> ORGANISM: Artificial sequence
     53 <220> FEATURE:
                                          e an artificial sequence for use in the ZAP-70 kinase
                                 LAT-11 i
     55 <223 > OTHER INFORMATION
888
     56
              аy
     58 <220> FEATURE:
     60 <221> NAME/KEY: MISC_FEATURE
     62 <222> LOCATION: (1) .. (1)
     64 <223 > OTHER INFORMATION: (X=L(+)-biotinyl-aminohexanoyl
     68 <400> SEQUENCE: 1
W--> 70 Kaa Glu Glu Gly Ala Pro Asp Tyr Glu Asn Leu Gln Gln Leu Asn
     71 1
     74 <210> SEQ ID NO: 2
     76 <211> LENGTH: 12
     76 <212> TYPE: PRT
     80 <213> ORGANISM: Artificial sequence
     04 <220> FEATURE:
                                                 sequence for use in FAK assay
     86 <223> OTHER INFORMATION ( Biot-Y397
     88 <220> FEATURE:
     90 <221> NAME/KEY: MISC_FEATURE
```

NOV-21-2005 11:49

NOVARTIS INTELLECT PROP

P.09 973 781 8064

21

Page 2 of :

RAW SEQUENCE LISTING

137 tdagtgtggt ctcgtctgcc c

DATE: 09/23/2004

PATENT APPLICATION: US/10/507,060

TIME: 11:58:50

Input Set : A:\PTO.FG.txt

Output Set: M:\CRF4\09232004\J507,060.raw

Xaa can only represent a single and and 92 <222> LOCATION: (1)..(1) 94 <223> OTHER INFORMATION: (Biotin 98 <400> SEQUENCE: 2 W--> 100 Rea Ser Glu Thr Asp Asp Tyr Ale Glu Ile Ile Asp 5 101 1 104 <210> SEQ ID NO: 3 106 <211> LENGTH: 21 108 <212> TYPE: DNA 110 <213> ORGANISM: Artificial sequence 114 <220> FEATURE: 116 <223> OTHER INFORMATION: PCR primer for preparing human FAK cDNA . 118 <400> SEQUENCE: 3 119 atggcagctg cttaccttga c 21 122 <210> SEQ ID NO: 4 124 <211> LENGTH: 21 126 <212> TYPE: DNA 128 <213> ORGANISM: Artificial sequence 132 <220> FEATURE: 134 <223> OTHER INFORMATION: FCR primer for preparing human FAK cDNA 136 <400> SEQUENCE: 4

BEST AVAILABLE COPY

NOV-21-2005 11:49

NOVARTIS INTELLECT PROP

973 781 8064 P.10

Page 3 of:

RAW SEQUENCE LISTING ERROR SUMMARY PATENT APPLICATION: US/10/507,060

DATE: 09/23/2004 TIME: 11:58:51

Input Set : A:\PTO.FG.txt

Output Set: N:\CRF4\09232004\J507060.raw

<u>Please Note:</u>
Use of n and/or Xea have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xea.

Seq#:1; Xaa Pos. 1 Seq#:2; Xaa Pos. 1 NOV-21-2005 11:49

NOVARTIS INTELLECT PROP

973 781 8064 P.11

Page 4

verification summary

PATENT APPLICATION: US/10/507,060

DATE: 09/23/2004 TIME: 11:58:51

Input Set : A:\PTO.FG.txt

Output Set: N:\CRF4\09232004\J507060.raw

L:29 M:270 C: Current Application Number differs, Replaced Current Application No L:29 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:70 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0 L:100 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0

007	70

1
Case No
10 507,000
Mauing Date.
Due Date: FV524615532US
Express Mail No.:
- Abo date of receipt of the items with
Amendment/Response/Letter 100 +
Appin. Filing Papers - Fee \$
☐ PCT National Stage
☐ Provisional Application ☐ RCE ☐ DIV ☐ CONT ☐ CIP
Specification P8's
Executed Inexecuted Decl. Fee \$ 30202122
RCE DIV CONT CIP Specification Pg's (Executed Unexecuted Declification Req. Missing Parts/Missing Req. Preliminary Amendment Control of Priority Control of Control of Priority Contr
Preliminary Amendment
Claim of Priority Cartified Copyrs JUN 2005
D Amendment After Final Im SPORMATO
Notice of Appeal - Fee \$
- A A Delof - Fee S
Issue Fee Payment \$
Assignment Rec. Req Fee \$
Appeal Brief Patent Patent
(
X PTO-1449 Form P8 500, TO
Pet for Ext. of Time - Fee \$_450.
Application Data Sheet Pors/Seq. Disk + Startement
DApplication Data Sheet By Seq. Listings Pg's/Seq. Disk + Startemant St
• 📮
TRS
INS Initing 3 Bac'd PCT/PTO 1 3 JUN 2007 2/99A Rev. I
INICIALLY HARLY PULLED - 0 - COO

This Page is Inserted by IFW Indexing and Scanning Operations and is not part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

BLACK BORDERS

IMAGE CUT OFF AT TOP, BOTTOM OR SIDES

FADED TEXT OR DRAWING

BLURRED OR ILLEGIBLE TEXT OR DRAWING

SKEWED/SLANTED IMAGES

COLOR OR BLACK AND WHITE PHOTOGRAPHS

GRAY SCALE DOCUMENTS

LINES OR MARKS ON ORIGINAL DOCUMENT

REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY

IMAGES ARE BEST AVAILABLE COPY.

OTHER:

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.